Format No: CP/TF/01

## TEST REPORT ON COARSE AGGREGATES

**Lab ID** : **CP-2018-03-21-03** **Date: 24-03-18**

**Sample ID No** : 2018-03-21-03 /02(a)

### PHYSICAL PROPERTIES

| Sl.no | Tests | Result | Requirements as per IS:383-2016 |
|---|---|---|---|
| 1 | Flakiness Index(%) | 12.1 | Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate |
| 2 | Elongation Index(%) | 11.5 | |
| 3 | Specific Gravity | 2.62 | – |
| 4 | Bulk Density(Loose) (Kg/l) | 1.45 | – |
| 5 | Bulk Density(Compacted) (Kg/l) | 1.49 | – |
| 6 | Water Absorption(%) | 0.22 | – |

**Note:**
The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

CIVIL PRO Sig..... Date..... BANGALORE

**FOR CIVIL Pro.**

**R KARTHIK RECHAN**
Authorized Signatory
**Quality Manager**

ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ಕೆಪಿಟಿಸಿಎಲ್, ವಿದ್ಯುತ್ ಸರಬರಾಜು ಮತ್ತು
ಪ್ರಸರಣ ಬೆಂಗಳೂರು ದಕ್ಷಿಣ ವಿಭಾಗ
ಬಿಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು


****End of Report****



Scanned by CamScanner

## TEST REPORT ON COARSE AGGREGATES

Date: 24-03-18

| | | |
|---|---|---|
| Lab ID | : | CP-2018-03-21-03 |
| Customer | : | Assistant Executive Engineer, Shettyhalli Sub Division, BBMP, Bangalore. |
| Address | : | Shettyhalli Sub Division, BBMP, Bangalore. |
| Project Name | : | Construction of RCC drain in 22nd, 23rd and other cross roads at Ravindra Nagara in Ward No.13 in Ward No.13 in Shettyhalli Sub |
| Agency | : | Sri.Kumar B.J #01, Shree Nilaya, Behind Ranga Mandira, Nagasandra Post, Bengalore-560073 |
| Customer Reference | : | EE/DD/WO/314/17-18 |
| Source of Sample | : | Sample supplied by Agency |
| Sample Condition | : | Satisfactory |
| Date of Receipt | : | 21-03-18 |
| Sample ID No | : | 2018-03-21-03 /02(b) |
| Sample Type/ Size | : | 20mm down size coarse aggregate |
| Reference to BIS codes | : | IS: 383:2016 (Specification for Coarse and fine Aggregates )<br>IS: 2386 :1963(Part - 1,3,4) RA2011<br>IS 2386 Part 1: Particle Size and Shape<br>IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption<br>IS 2386 Part 4: Mechanical Properties |
| Date of test | : | 21-03-18 |

**SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:**

Total weight taken : 5000 grams

| Sample No. | Sieve No. | Weight Retained in gms | Cumulative Weight Retained in gms | % Cumulative Weight Retained | % Passing | Required as per IS 383:2016 |
|---|---|---|---|---|---|---|
| 1 | 40 mm | 0 | 0 | 0 | 100 | 100 |
| 2 | 20 mm | 198 | 198 | 4.0 | 96.0 | 90-100 |
| 3 | 10 mm | 2585 | 2783 | 55.7 | 44.3 | 25-55 |
| 4 | 4.75 mm | 1869 | 4652 | 93.0 | 7.0 | 0-10 |
| 5 | Pan | 348 | 5000 | 100 | 0 | _ |



CIVIL PRO Sig..... Date..... BANGALORE



Scanned by CamScanner

Format No: CP/TF/01

## TEST REPORT ON COARSE AGGREGATES

**Lab ID** : **CP-2018-03-21-03** **Date: 24-03-18**

**Sample ID No** : 2018-03-21-03 /02(b)

### PHYSICAL PROPERTIES

| Sl.no | Tests | Result | Requirements as per IS:383-2016 |
|---|---|---|---|
| 1 | Flakiness Index(%) | 9.2 | Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate |
| 2 | Elongation Index(%) | 11.8 | |
| 3 | Specific Gravity | 2.64 | – |
| 4 | Bulk Density(Loose) (Kg/l) | 1.48 | – |
| 5 | Bulk Density(Compacted) (Kg/l) | 1.53 | – |
| 6 | Water Absorption(%) | 0.18 | – |
| 7 | Aggregate crushing Value(%) | 22.9 | Max 30% for Aggregates to be used in concrete for wearing Surface, In case Aggregate Crushing Value Exceeds 30% then the test for ten percent fines should be conducted for Aggregates to be used in concrete other than for wearing Surface. |
| 8 | Aggregate Impact Value(%) | 23.7 | 30% for Aggregates to be used in concrete for wearing Surface, 45% for Aggregates to be used in concrete other than for wearing Surface. |

**Note:**

The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

ಸಾರ್ವಜನಿಕ ಕಾಮಗಾರಿಗಳ ಗುತ್ತಿಗೆದಾರರು
ಸಣ್ಣ ನೀರಾವರಿ, ದಾವಣಗೆರೆ ವಲಯ
ಪ್ರಮುಖ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro,

R KARTHIK RECHAN
Authorized Signature
Quality Manager



M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com



Scanned by CamScanner

Format No: CP/TF/01

# TEST REPORT OF FINE AGGREGATE

**Date: 24-03-18**

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2018-03-21-03** |
| **Customer** | : | Assistant Executive Engineer, Shettyhalli Sub Division, BBMP, Bangalore. |
| **Address** | : | Shettyhalli Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Construction of RCC drain in 22nd, 23rd and other cross roads at Ravindra Nagara in Ward No.13 in Ward No.13 in Shettyhalli Sub Division. |
| **Agency** | : | Sri.Kumar B.J #01, Shree Nilaya, Behind Ranga Mandira, Nagasandra Post, Bengalore-560073 |
| **Customer's Reference** | : | EE/DD/WO/314/17-18 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 21-03-18 |
| **Sample ID No** | : | 2018-03-21-03 /03 |
| **Sample Type** | : | Fine Aggregate |
| **Reference to BIS codes** | : | IS 383 : 2016 (Specification for Coarse and fine Aggregates)<br>IS: 2386 :1963(Part - 1, 3) RA2012<br>IS 2386 Part 1: Particle Size and Shape<br>IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption |
| **Date of test** | : | 21-03-18 |
| **Total weight taken** | : | 1000 grams |

| Sl.no | Sieve Size | Weight Retained (gms) | Cumulative Weight Retained (gms) | % Cumulative Weight Retained | % Passing | Requirement as per IS 383:2016 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Grading Zone I | Grading Zone II | Grading Zone III | Grading Zone IV |
| 1 | 10 mm | 0 | 0 | 0.0 | 100.0 | 100 | 100 | 100 | 100 |
| 2 | 4.75 mm | 23 | 23 | 2.3 | 97.7 | 90-100 | 90-100 | 90-100 | 95-100 |
| 3 | 2.36 mm | 185 | 208 | 20.8 | 79.2 | 60-95 | 75-100 | 85-100 | 95-100 |
| 4 | 1.18 mm | 224 | 432 | 43.2 | 56.8 | 30-70 | 55-90 | 75-100 | 90-100 |
| 5 | 600 micron | 201 | 633 | 63.3 | 36.7 | 15-34 | 35-59 | 60-79 | 80-100 |
| 6 | 300 micron | 189 | 822 | 82.2 | 17.8 | 5-20 | 8-30 | 12-40 | 15-50 |
| 7 | 150 micron | 132 | 954 | 95.4 | 4.6 | 0-10 | 0-10 | 0-10 | 0-15 |
| 8 | Pan | 46 | 1000 | 100.0 | 0.0 | --- | --- | --- | --- |

**Result :The tested Sample Conforms to Grading Zone II**



CIVIL PRO Sig..... Date..... BANGALORE



Scanned by CamScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY &NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005
# 4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

# TEST REPORT OF FINE AGGREGATE

**Lab ID** : CP-2018-03-21-03 **Date: 24-03-18**

**Sample ID No** : 2018-03-21-03 /03

## PHYSICAL PROPERTIES

| Sl.no | Tests | Result | Requirements as per IS 383:2016 |
|---|---|---|---|
| 1 | Water Absorption(%) | 1.88 | – |
| 2 | Specific Gravity | 2.54 | – |
| 3 | Material finer than 75 micron(%) | 4.2 | Uncrushed fine Aggregate Max 3%, Crushed Fine aggregate Max 15%, Mixed Fine aggregate Max 12%, Manufactured Fine aggregate Max 10% |

**Note:**
The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

CIVIL Pro Sig..... Date..... BANGALORE

**FOR CIVIL Pro.**

**R KARTHIK RECHAN**
Authorized Signatory
**Quality Manager**


****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com



Scanned by CamScanner

Format No: CP/TF/01

# TEST RESULTS OF STEEL

Date: 22-03-18

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2018-03-21-03** |
| **Customer** | : | Assistant Executive Engineer, Shettyhalli Sub Division, BBMP, Bangalore. |
| **Address** | : | Shettyhalli Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Construction of RCC drain in 22nd, 23rd and other cross roads at Ravindra Nagara in Ward No.13 in Ward No.13 in Shettyhalli Sub Division. |
| **Agency** | : | Sri.Kumar B.J #01, Shree Nilaya, Behind Ranga Mandira, Nagasandra Post, Bengalore-560073 |
| **Customer's Reference** | : | EE/DD/WO/314/17-18 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 21-03-18 |
| **Sample ID No** | : | 2018-03-21-03 /04 |
| **Sample Type** | : | Sunvik |
| **Reference to BIS codes** | : | IS 1786-2008, IS:1608-2005(RA 2011), IS 1599-2012. |
| **Date of test:** | : | 21-03-18 |

| Sl.No | Identification of sample | Grade of the sample | Diameter of the steel bar | Weight of the sample | Yield stress | Tensile strength | Elongation | Bend test | Rebend test |
|---|---|---|---|---|---|---|---|---|---|
| | | | (mm) | (kg/m) | (N/mm2) | (N/mm2) | (%) | | |
| 1 | Sunvik | Fe500 | 8 | 0.392 | 529 | 638 | 22.0% | Satisfactory | Satisfactory |
| 2 | Sunvik | Fe500 | 10 | 0.615 | 542 | 662 | 20.0% | Satisfactory | Satisfactory |
| 3 | Sunvik | Fe500 | 12 | 0.887 | 575 | 680 | 19.0% | Satisfactory | Satisfactory |

**Note:**

The results pertain to the samples received and tested.
All Information furnished by Customer/Representative
Any correction in the report will make this report invalid
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

FOR CIVIL Pro.

CIVIL Pro BANGALORE Sig..... Date.....

R KARTHIK RECHAN
Authorized Signatory
Quality Manager


*End of Report*



Scanned by CamScanner